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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,508	10/26/2001	Darryl Cynthia Moore	36968.262345 (BS01239)	3347

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EDWARDS, ANTHONY Q

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2835

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/046,508	MOORE ET AL.
	Examiner	Art Unit
	Anthony Q. Edwards	2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 May 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7,9-19,21-31 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7,9-19,21-31 and 33-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1-7, 9-19, 21-31 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,764,474 to Youens in view U.S. Patent No. 5,168,427 to Clancy et al. Referring to claims 1 and 12, Youens discloses an ergonomic apparatus (i.e., portable computer), comprising a main body (10), a keyboard housing (12) having a top surface, and a front edge closest to a user, a back edge farthest from the user and two side edges. See FIGS 1-4 and column 3, lines 25-28. Youens also discloses a keyboard housing bottom surface operationally and functionally connected to the main computer body (see column 4, lines 25-41). Likewise, Youens discloses a positioning support (50) functionally connected to the keyboard housing operable for extending and adjusting a slope of the keyboard housing relative to the underlying main body (see column 4, lines 18-24).

Youens does not expressly disclose that the positioning support is for extending and adjusting the slope of the keyboard housing in discrete steps, such that the keyboard housing is adjustable to varying angles, desired by the user relative to the underlying main body.

Clancy et al. discloses a portable computer with tiltable keyboard structure having a pawl 80a member, which provides continuous slope adjustment in discrete steps. As indicated in FIG. 9 and in column 8, lines 3-19, this embodiment 80a of the pawl includes notches (120a, 117a, 118a), which allow for adjustment of the keyboard in "discrete steps such that the keyboard housing is adjustable to varying angles desired by the user." The discrete steps (i.e., open, intermediate, and closed) are varying angles desired by the user. It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the portable

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computer with tilting keyboard of Youens to include a mechanism that provides both slope adjustment in discrete steps, as well as continuous adjustment of the keyboard housing, as taught by Clancey et al., to allow the computer user to improve the typing position of the keyboard.

Referring to claim 24, 25 and 36, as indicated above, Youens in view of Clancey discloses an ergonomic keyboard, as claimed, including an ergonomic keyboard housing with a top surface, a bottom surface, a front edge closest to a user, a back edge farthest from the user and two side edges, comprising a positioning support operable for adjusting a slope of the keyboard in relation to an underlying main body. Youens in view of Clancey does not expressly disclose a process in which the keyboard is retrofitted into an otherwise standard laptop computer.

However, Examiner takes Official Notice that the use of retrofit modules, including keyboards, for laptop computers is conventional and well known.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to utilize a retrofit keyboard in a standard laptop computer since Examiner takes Official Notice that the use of keyboards as retrofit modules in laptop computers is conventional and well known.

Referring to claims 2, 13 and 27, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, further comprising one or more additional positioning supports (44). See FIG. 1B and the corresponding specification.

Referring to claims 3, 14 and 28, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, wherein the top surface of the keyboard housing comprises a plurality of keys (38). See FIG. 1 and the corresponding specification.

Referring to claims 4, 15 and 29, Youens in view of Clancey et al. discloses the apparatus and process for retrofitting a laptop computer, wherein the positioning support is attached at one end to at least one of the top surface, the bottom surface, the front edge, the back edge, and the two side edges of the keyboard housing. See column 4, lines 18-24.

Referring to claims 5 and 17, Youens in view of Clancey et al. discloses the apparatus, wherein the keyboard housing defines an embedded compartment in the main body. See column 3, line 43.

Referring to claims 6, 18 and 31, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, wherein the front edge of the keyboard housing is pivotally connected to the main body. See FIG 2 and the corresponding specification.

Referring to claims 7, 19 and 30, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, wherein the positioning support leg or rod (50) comprises at least one of a leg, a flap, a thumbscrew, and a rod. See FIG. 2 and column 4, lines 18-26.

Referring to claims 9, 21 and 33, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, wherein the positioning support provides for continuous slope adjustment. See FIG. 5C and the corresponding specification.

Referring to claims 10, 22 and 34, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, wherein the keyboard top

surface is flush with the main body when the positioning support is retracted. See FIG. 5B and the corresponding specification.

Referring to claims 11, 23 and 26, Youens in view of Clancey et al. discloses the ergonomic apparatus and process for retrofitting a laptop computer, wherein the main body comprises a laptop computer body. See FIG. 1 and the corresponding specification.

Referring to claim 16, Youens in view of Clancey et al. inherently discloses that the keyboard housing is standard equipment on a new laptop computer (See FIGS. 1-5).

Referring to claim 35, Youens in view of Clancey et al. disclose a process for retrofitting a laptop computer, wherein the keyboard is operationally connected to the main body by a wire 60. See FIG. 2 and the corresponding specification.

Response to Arguments

Applicant's arguments filed May 15, 2003 have been fully considered but they are not persuasive. As mentioned above, the pawl 80a of Clancey et al. includes notches (120a, 117a, 118a), which allow for adjustment of the keyboard as claimed, i.e., in "discrete steps such that the keyboard housing is adjustable to varying angles desired by the user." The discrete steps (i.e., open, intermediate, and closed) are varying angles desired by the user.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 703-605-4214. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (703) 308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-9929.

aqe
May 20, 2003

DARREN SCHUBERG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800